

**Work Order ID 57962**

April 21, 2010 9:19:30 AM



Page 1

Item ID: D206-642-541

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 21/04/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 28/04/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr	Revision Nbr
D3274	D
IIN-D206-642	Rev M

100

0.00



DOCUMENT CONTROL

DC

Document Control

Memo

0.00

Photocopy bluefile &amp; type labels per PPP. D206-642-541

CHG003

*N/A*

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Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

110

Operation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Skidtubes

Skidtubes

0.00

Memo

0.00

\*\*\*\*VERIFY AND INSPECT THE MATERIAL PRIOR TO USE\*\*\*\*

1- Bend FWD end of tube using bend prog D3274 FWD dwg D3274, cut fwd end of tube with saw table setup D3274.

DP 10-5-4

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding

3- weld fwd cap as per dwg D3274 and QSI004

AR Aluminum Rod Batch: m112507/m112860

BE 10-5-5

4- grind fwd cap weld on top surface only

BL 10-5-5

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

6- Drill Aft cap pilot hole using DT8025

7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D.  
Drill 3/16" pilot holes as per Dwg D3274

8 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

10-5-6

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Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

120



HandFinish

Hand Finishing

Operation  
Description

Chemical Conversion Coat per QSI005 4.1

Set Up/  
Run Hours

0.00

Draw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp1 - - AVM  
10-5-05

130



QC

Quality Control

QC3- Inspect Part Finish

0.00

S 10/15/11

0.00

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

S 10/15/11



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Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID  
150Operation  
Description  
SkidtubesSet Up/  
Run Hours  
0.00Draw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberReject  
NumberInsp.  
Stamp

Skidtubes

Skidtubes

Memo

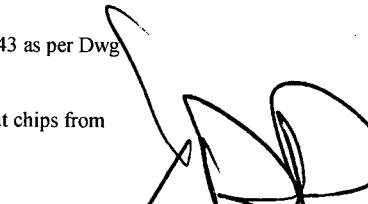
0.00

1-Open Ø0.313" and 0.375" crossbolt spacer holes using DT8743 as per Dwg  
D32742-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from  
inside the tube

3-Bond web in place as per Dwg D3274 &amp; QSI 015.

A/R  Sikaflex-291  11-3435 Sikaflex expire date:  10-11-30Start:  10-5-11 Time:  14:57AMFinish:  Time: 

(Adhere for 12 hours)



10-5-11

160



QC

QC5- Inspect part completeness to step on W/O

0.00

Quality Control

Memo

0.00

1 0 BE 10/05/18

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Revision ID:

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Start Date: 21/04/2010 Start Qty: 1.00

Accept



Setup Start



Required Date: 28/04/2010 Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

170

Operation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Skidtubes

Skidtubes

0.00

Skidtubes

Memo

0.00

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.

4/10/18

2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2  
OPEN HOLES TO .297". Deburr

4/10/18

3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD  
END OF TUBEDEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)  
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

h2 3.060 "

0.00

L°= 4.9°

6/10/18

40

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

190

Operation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Skidtubes

0.00

Skidtubes

Memo

0.00

Skidtubes

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274: Remember to back drill each hole before welding the other side. Use aluminum rod

A/R  Aluminum Rod  M112507

BE 10/05/25

3-Grind cross bolt welds flush as per Dwg D3274.

O.m 10-05-25 (2)

4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 and deburr.

200



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S wlo5/25

Memo

0.00

(2)

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

210



QC

Quality Control

Operation  
Description

QC10- Inspect visual per QSI004- ground welds

Set Up/  
Run Hours

0.00

Draw  
Number

Rev.

Draw  
Plan  
Code

Qty

Accept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

220



HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

0.00

0.00

0.00

RE-ROUTED PAR 07-03

① 4/10-6-1

230



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

0.00

0.00

11/14/207

0.00

0.00

0.00

Memo

START TIME: 3:15pm  
OVEN TEMPERATURE: 320°  
FINISH TIME: 3:15pm

2/11/10/06/01

1 8

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
Description

240

QC3- Inspect Part Finish



QC

Quality Control

Set Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

250



HandFinish

Hand Finishing

0.00

ml

10

06

14

①

Memo

0.00 *Proctor*1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.  
A/R□□Sikaflex-291  13435   
Sikaflex expire date:  10/11

260



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S. w/o 6/14

Memo

0.00

Inspect Nut Plate &amp; Inserts

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Stop



Start Date: 21/04/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 28/04/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

270

Operation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

0.00

HAND FINISHING RESOURCE #1

0.00

HandFinish

Hand Finishing

Memo

1-Install wearpads &amp; gaskets as per Dwg D3274.

2-Install ring as per Dwg D3274

A/R  Sikaflex-291  113435 Sikaflex expire date:  10/11

3-Inspect for foreign objects as per QSI 024

4-Spray inside of tube on both sides of web with LPS-3  
A/R  LPS-3  Batch: 113435

N/A m10/06/14

5-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R  Sikaflex-291  113435 Sikaflex expire date:  10/11

280



QC5- Inspect part completeness to step on W/O

0.00

QC

Quality Control

Memo

0.00

S10/06/15

80

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Item ID: D206-642-541

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Setup Start



Revision ID:

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Stop



Start Date: 21/04/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 28/04/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
Description

290



Packaging

Identify as per dwg &amp; Stock Location:

Set Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

0.00

PPP

57370

0.00

10/06/10 CC

300



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/06/10 AJ

MF  
(06-11)

# Picklist Print

April 21, 2010 9:19:34 AM

Page 1

Work Order ID: 57962



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Comments: IPP Rev:B 05.09.23 Revised per D206-642 Rev. J KJ/JLM  
IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM  
IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD  
IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Start Date: 21/04/2010

Required Date: 28/04/2010

Start Qty: 1.00

Required Qty: 1.00

D2600-1-190



Manufactured No

110 Each 44.0000 1.0000



Extrusion Round 3/206

Warehouse

Location

Main Warehouse

LG

47575

Loc Qty

1  
44  
44

Loc Code

10-5-4

D3285-1



Manufactured No

110 Each 158.0000 1.0000



Cap

Warehouse

Location

Main Warehouse

LG

47635  
52511  
52647

Loc Qty

158  
9  
74  
75

Loc Code

1 10-05-05

D3282-041



Float Web (206L/407)

D2649



Cross Bolt Spacer

Manufactured No

150 Each 0.0000 1.0000



Manufactured No

B57539

190 Each 85.0000 1.0000



Warehouse

Location

Main Warehouse

LG

55000

Loc Qty

85  
85

Loc Code

12 10/05/20

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Page 2

Work Order ID: 57962



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 21/04/2010

Required Date: 28/04/2010

Comments:

IPP Rev:B 05.09.23  Revised per D206-642 Rev. J  KJ/JLM  
IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets  JLM   
IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD  
IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

D3275-1



Manufactured No

190 Each 20.0000 12.0000



Crossbolt Spacer

Warehouse

Location

Main Warehouse

LG

Loc Qty

Loc Code

858179  
857513



20/05/20

CR3212-4-03



Purchased No

250 Each 2,117.000 2.0000



Cherry Rivet

Warehouse

Location

Main Warehouse

ST311

Loc Qty

Loc Code

2117

10-06-14

111359

92

112314

125

114436

1900

D3415-041



Manufactured No

250 Each 75.0000 1.0000



Nut Plate

Warehouse

Location

Main Warehouse

ST056

Loc Qty

Loc Code

75

10-06-14

33842

75

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IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD  
IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

CCR264SS3-3



Purchased No

250

Each

724.0000 2.0000



Cherry Rivet

MM 10-06-14

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

ST311	724	
111548	4	
112314	4	
113539	92	
<u>113973</u>	<u>624</u>	

ALS4-1032-130



Purchased No

250

Each

1,912.000 78.0000



Insert

MM 10-06-14

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

ST282	1912	
110511	40	
114407	1872	

B# 114654

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IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Start Date: 21/04/2010

Required Date: 28/04/2010

Start Qty: 1.00

Required Qty: 1.00

D3536-15



Manufactured No

270

Each

19.0000

1.0000



Gasket

B# 59238

Warehouse

Location

Main Warehouse

FP

Loc Qty

19

51600

7

56055

12

D3536-23



Manufactured No

270

Each

16.0000

1.0000



Gasket

B# 5889

Warehouse

Location

Main Warehouse

FP

Loc Qty

4

53468

4

Main Warehouse

FP011

12

57529

12

MW 10-06-14

MW 10-06-14

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IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

D3536-35

Manufactured No

270

Each

18.0000

1.0000



Gasket

*B#  
B 58637  
SAC 37*

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

6

51628

6

Main Warehouse

FP012

12

57530

12

D3536-39

Manufactured No

270

Each

11.0000

1.0000



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

11

48161

1

51637

10

*MM 10-08-14*

*MM 10-08-14*

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Start Date: 21/04/2010

Required Date: 28/04/2010

Start Qty: 1.00

Required Qty: 1.00

D3535-15



Manufactured No

270

Each

14.0000

1.0000



Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

FP 14

53462 4

56053 10

D3535-35



Manufactured No

270

Each

16.0000

1.0000



Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

FP 5

51608 5

Main Warehouse

FP018 11

57528 11

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IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

D3535-39



Manufactured	No	270	Each	9.0000	1.0000
--------------	----	-----	------	--------	--------



Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

FP	9	
----	---	--

51619

FP	9	
----	---	--

D3535-23



Manufactured	No	270	Each	24.0000	1.0000
--------------	----	-----	------	---------	--------



Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

FP	11	
----	----	--

53467

56054

Main Warehouse

FP21	13	
------	----	--

57730

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IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

D3537-3



Manufactured No

270

Each

24.0000

1.0000



Wearpad

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

FP 2

35697 2

Main Warehouse

FP17 22

57512 22

D3537-1



Manufactured No

270

Each

51.0000

9.0000



Wearpad

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

FP 9

55465 9

Main Warehouse

FP17 42

57510 42

NAS1149C0330R

~~100000105~~



washer

B# 58178

Purchased No

270

Each

0.0000

80.0000



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Shop Packet Print

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IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

AN960C416



Purchased No

270

Each

376.0000 1.0000



washer

W/ 10.06.14

<u>Warehouse</u>	<u>Loc Oty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

ST346 376

100993

376

D3672-1



Manufactured No

270

Each

1,581.000 2.0000



Phenolic Washer

<u>Warehouse</u>	<u>Loc Oty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

ST077 1581

47628

81

51674

500

52505

1000

W/ 10.06.14

# Picklist Print

April 21, 2010 9:19:34 AM

Page 10

Work Order ID: 57962



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 21/04/2010

Required Date: 28/04/2010

Comments: IPP Rev:B 05.09.23 □ Revised per D206-642 Rev. J □ KJ/JLM  
IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM □  
IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD  
IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

AN3C4A



Purchased No

270

Each

1,799.000 80.0000



BOLT

B# 114859 x 67

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST350	1799	
114103	501	
<u>114108</u> x 15	300	
114330	498	
114416	500	

MM 10.08.14

AN4C5A



Purchased No

270

Each

533.0000 1.0000



BOLT

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST346	533	
<u>110552</u>	33	
112243	500	

MM 10.08.14

# Picklist Print

April 21, 2010 9:19:34 AM

Page 11

Work Order ID: 57962



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 21/04/2010

Required Date: 28/04/2010

Comments: IPP Rev:B 05.09.23 Revised per D206-642 Rev. J  KJ/JLM  
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IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD  
IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

D2646



Manufactured No

270 Each 32.0000 1.0000



Aft Cap

B# 57332

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP6 28

52663 28

Main Warehouse

fp7 4

52663 4

10.06.14

D3413-1



Manufactured No

270 Each 31.0000 1.0000



Ring

B# 58524

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST473 31

51586 8

53446 23

10.06.14

**DART**

DESIGN <b>CP</b>	DRAWN BY <b>PH</b>	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
CHECKED <b>    </b>	APPROVED <b>    </b>	DRAWING NO. <b>D3274</b>	REV. D SHEET 1 OF 4
DATE <b>06.12.19</b>	TITLE <b>SKIDTUBE ASSEMBLY</b>		SCALE <b>NTS</b>
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

**RELEASED**07.02.12 **DEO ATTACHED**

Qty -041	Qty -043	Part Number	Description	Shop Copy	Return To	Engineering	Controlled Copy	Subject	Amendment	Without Notice	Work Order	Number
X		D3274-041	SKIDTUBE ASSEMBLY									
	X	D3274-043	SKIDTUBE ASSEMBLY									
1	1	D2600-1-240	EXTRUSION									
1	1	D2646	AFT CAP									
12	12	D2649	CROSS BOLT SPACER	SHOP COPY								
12	37	D3275-1	CROSS BOLT SPACER	RETURN TO								
1	1	D3282-041	FLOAT WEB	ENGINEERING								
1	1	D3285-1	CAP	UNCONTROLLED COPY								
1	1	D3413-1	RING	SUBJECT								
1	1	D3415-041	NUT PLATE	TO AMENDMENT								
1	1	D3535-15	WEARSHOE	WITHOUT NOTICE								
1	1	D3535-23	WEARSHOE	WORK ORDER								
1	1	D3535-35	WEARSHOE	NO.								
1	1	D3535-39	WEARSHOE	5762								
1	1	D3536-15	GASKET									
1	1	D3536-23	GASKET									
1	1	D3536-35	GASKET									
1	1	D3536-39	GASKET									
9	9	D3537-1	WEARPAD									
1	1	D3537-3	WEARPAD									
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)									
80	80	AN3C4A	BOLT									
1	1	AN4C5A	BOLT									
1	1	AN960C416	WASHER									
80	80	AN960C10L	WASHER									
2	2	CCR264SS3-3	RIVET									
2	2	CR3212-4-03	RIVET									
2	2	NAS1515H3L	WASHER									

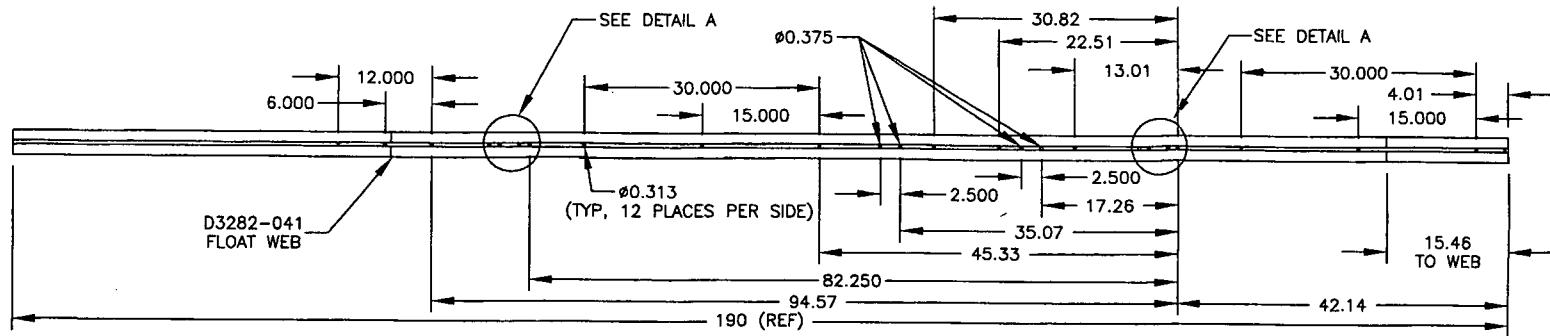
**GENERAL NOTES:**

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1  
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

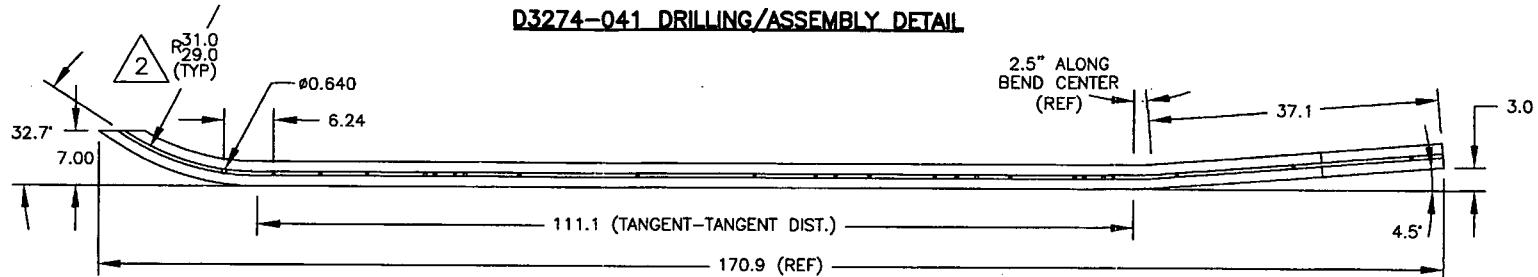
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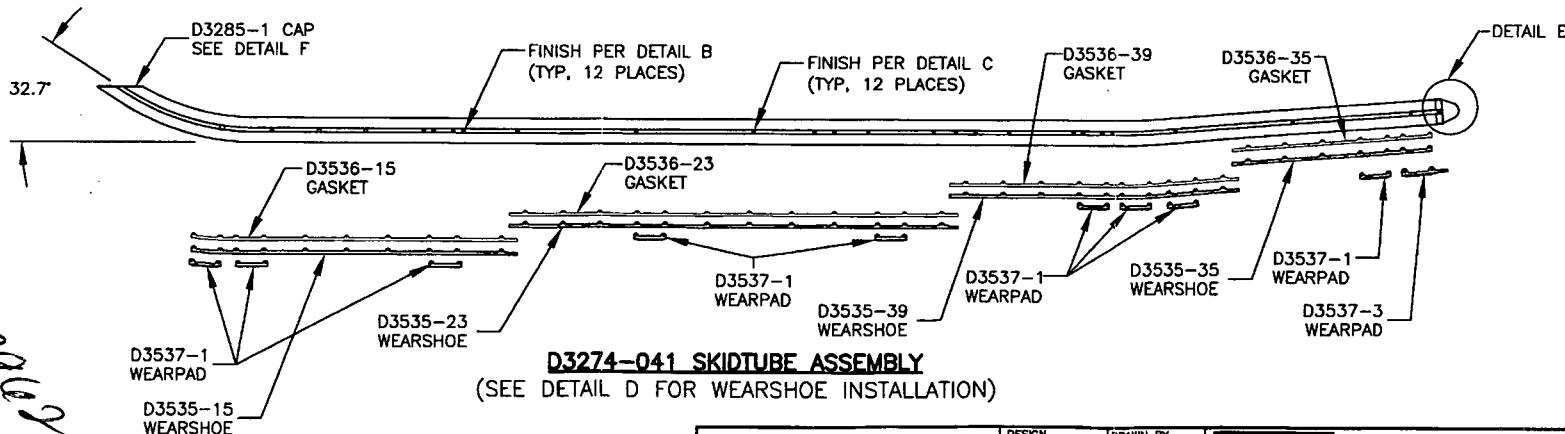
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**D3274-041 DRILLING/ASSEMBLY DETAIL**



**D3274-041 BEND/DRILLING DETAIL**

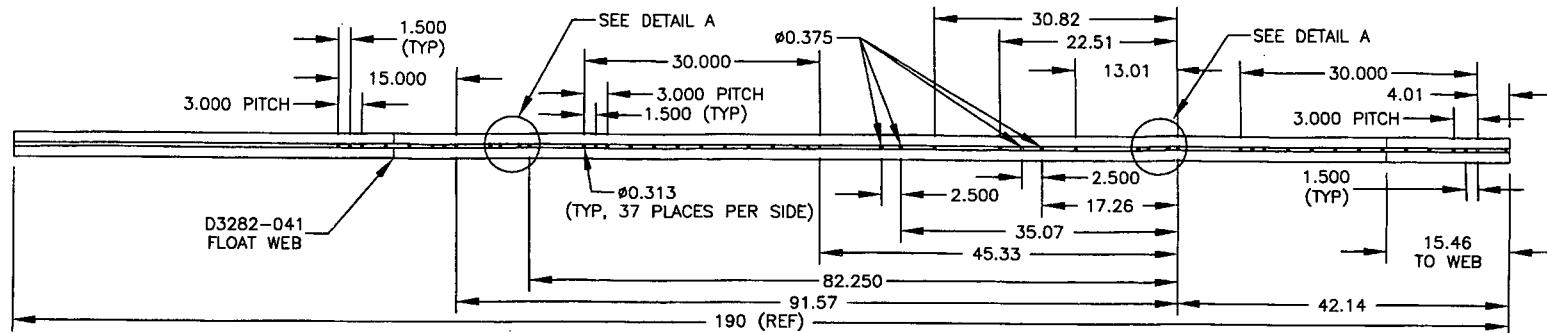


**D3274-041 SKIDTUBE ASSEMBLY**  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

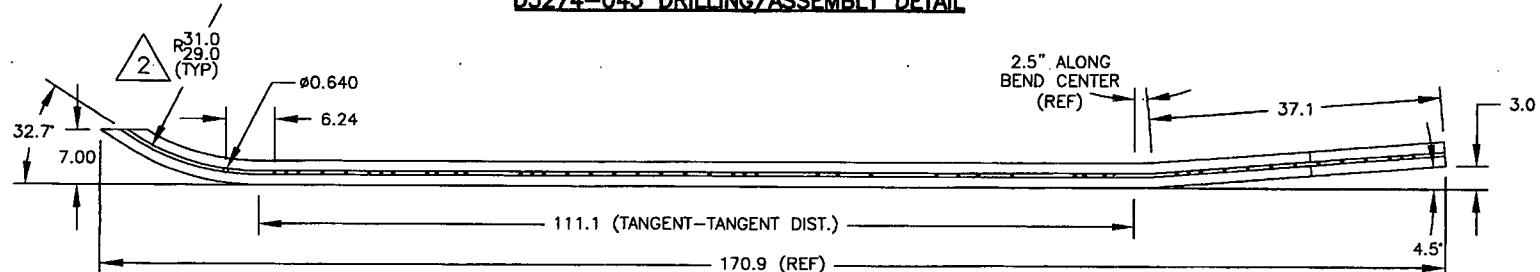
RELEASED  
07.02.12

DESIGN	DRAWN BY	DART	DART AEROSPACE USA, INC. PORT HADLOCK, WA
CP	PH		REV. D
CHECKED	APPROVED		DRAWING NO.
			D3274
DATE		TITLE	SCALE
06.12.19		SKIDTUBE ASSEMBLY	1:15

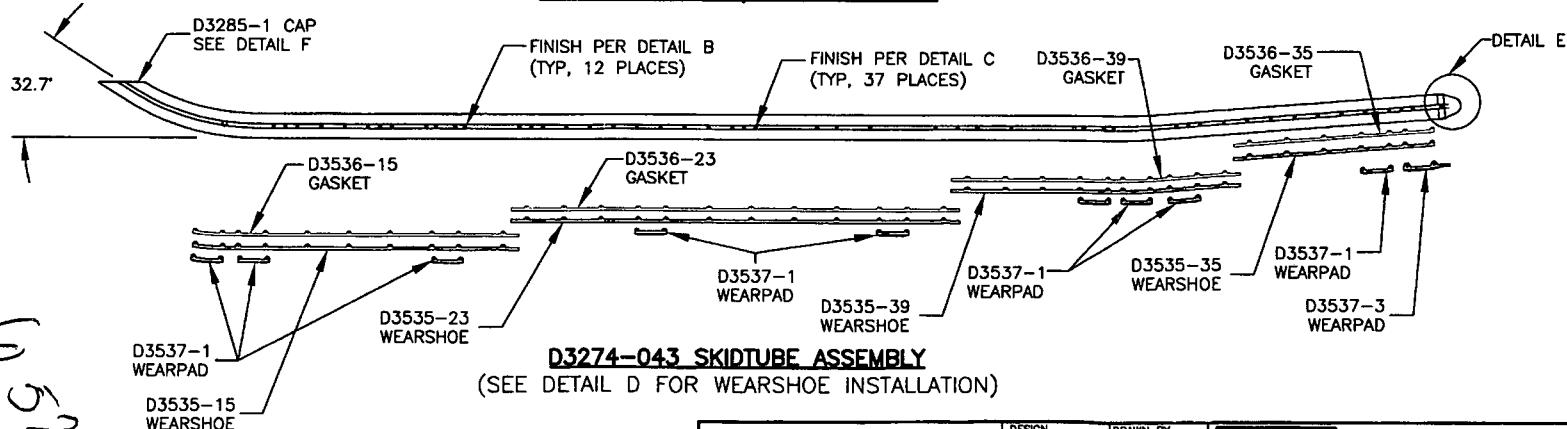
DEO ATTACHED



D3274-043 DRILLING/ASSEMBLY DETAIL



D3274-043 BEND/DRILLING DETAIL



D3274-043 SKIDTUBE ASSEMBLY  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED  
67-02-12

W/0 5/2019

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DART

DART AEROSPACE USA, INC.  
PORT HADLOCK, WA

REV. D

SHEET 3 OF 4

DRAWING NO.

D3274

DATE

06.12.19

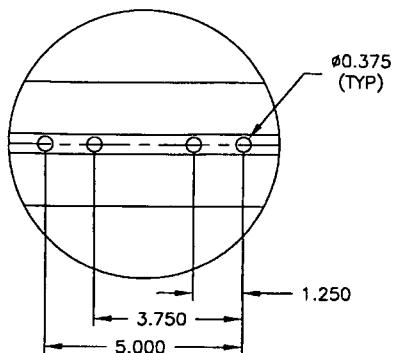
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SKIDTUBE ASSEMBLY

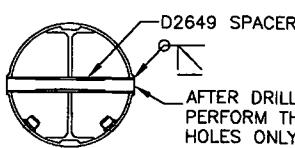
SCALE

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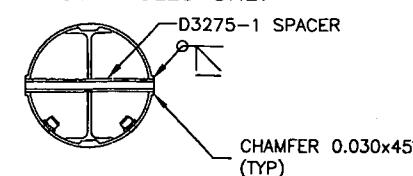
### DETAIL A: DRILL DETAIL



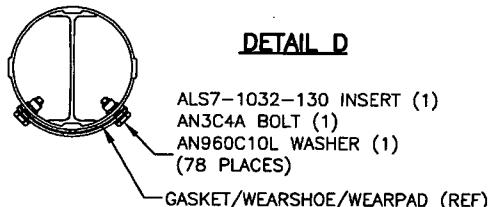
### DETAIL B FOR $\phi 0.375$ HOLES ONLY



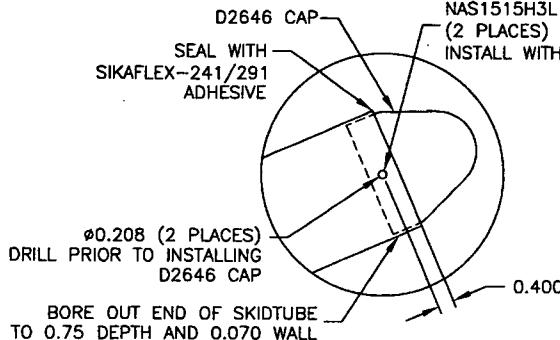
### DETAIL C FOR $\phi 0.313$ HOLES ONLY



### DETAIL D

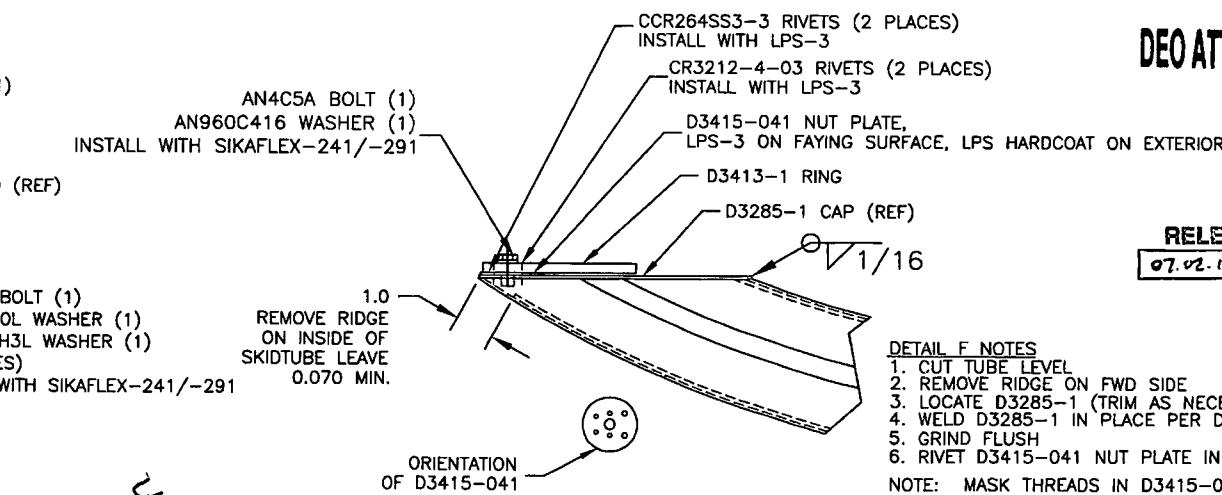


### DETAIL E



AN4C5A BOLT (1)  
AN960C416 WASHER (1)  
INSTALL WITH SIKAFLEX-241/-291

### DETAIL F: END FINISHING DETAIL



### DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041 PRIOR TO FINISH

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CP	PH		
CHECKED <input checked="" type="checkbox"/>	APPROVED <input checked="" type="checkbox"/>	DRAWING NO. D3274	REV. D SHEET 4 OF 4

DATE

06.12.19

TITLE

SKIDTUBE ASSEMBLY

1:1

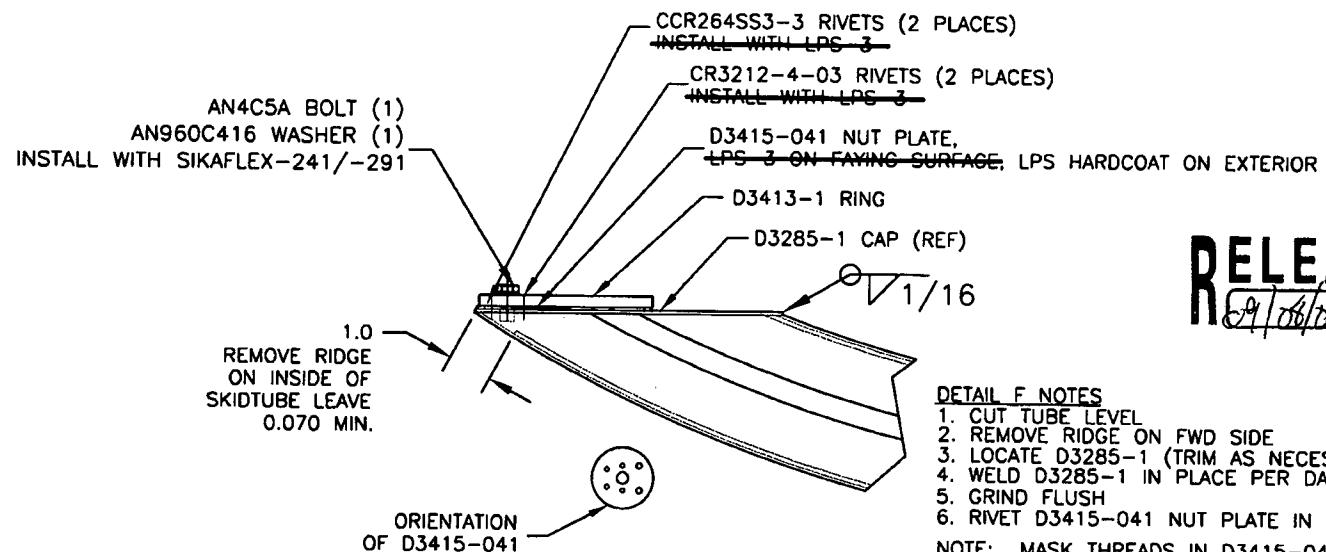
DRAWING NO. D3274	TITLE SKIDTUBE ASSEMBLY	REV. D	DART AEROSPACE USA, INC ENGINEERING ORDER	D.E.O. NO. D3274-D-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>GP</i>	CHECKED <i>AS</i>	MFG. APPR. <i>M</i>	APPROVED <i>MAP</i>	DE APPR. <i>#</i>		
DATE 09.06.17	DATE 09.06.23	DATE 09/06/23	DATE 09/06/23	DATE 09/06/23	DATE 09.06.23	

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: "~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS 3' AFTER FINISH AND INSTALLATION OF INSERTS.~~  
~~COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF~~  
~~POWDER COATING WITH MEK DEGREASER."~~

AMEND DETAIL F AS SHOWN:

### DETAIL F: END FINISHING DETAIL



#### DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

*4/05/2014*

NO 230

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 57358  
Part number: DAC6-642-541  
Description: Steel tube  
Welding Process: Tig  Mig   
Base material: Aluminium  
Current: AC  DC

TEST REQUIREMENTS AND RESULTS

Visual:  pass [✓] fail [ ]  
Penetration:  pass [✓] fail [ ]

UNACCEPTABLE

Cracks:  pass [✓] fail [ ]  
Undercut:  pass [✓] fail [ ]  
Pin holes:  pass [✓] fail [ ]  
Overlap (cold lap)  pass [✓] fail [ ]  
Porosity (surface):  pass [✓] fail [ ]  
Coloration:  pass [✓] fail [ ]

Qualifier Barclay Elliott Date of Test Coupon 10-05-05

Welder Barclay Elliott Date of Test Coupon 10-05-05

The above named individual is qualified in accordance with AWS D17.1.2001 to weld